

**REMARKS**

Claims 1-21 were originally filed in the application.

Claims 1, 3-9, 11-7 and 19-24 are pending in the application.

Claims 1, 3-9, 11-17 and 19-24 have been rejected.

Claims 1, 3-9, 11-17 and 19-24 remain pending in this application.

Reconsideration of the claims is respectfully requested.

**I. CLAIM REJECTIONS -- 35 U.S.C. § 112**

Claims 1, 3-9, 11-17 and 19-24 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter.

There are two separate requirements under 35 U.S.C. § 112, second paragraph. MPEP § 2171, p. 2100-211 (8<sup>th</sup> ed., rev. 4, October 2005). The first is subjective and requires that the claims must set forth the subject matter that the *Applicants* regard as their invention. *Id.* The second is objective and requires that the claims must particularly point out and distinctively define the metes and bounds of the subject matter that will be protected by the patent grant (*i.e.*, whether the scope of the claim is clear to one of ordinary skill in the art). *Id.* The Examiner should explain whether the rejection is based on indefiniteness or on the failure to claim what the Applicants regard as their invention. *Id.* at 2100-212 (*citing Ex parte Ionescu*, 222 U.S.P.Q. 537, 539 (Bd. App. 1984)).

The Office Action argues that the term “N layer” is vague and indefinite as the “N” has not been defined in the claim. Additionally, the Office Action argues that the term “R route” is vague

and indefinite as the “R” has not been defined in the claim. The Applicants submit that the terms “N” and “R” are variable terms that denote a number of “N” Layer 2 modules and a number of “R” route processing modules. The terms are supported in the specification (paragraph [0022]) and would be readily apparent to one of ordinary skill in the art as denoting a number.

Accordingly, the Applicants respectfully request that the Examiner withdraw the § 112 rejection.

## **II. CLAIM REJECTIONS -- 35 U.S.C. § 103**

Claims 1, 3-4, 6-9, 11-12, 14-17, 19-20 and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,078,963 to *Civanlar, et al.* (hereinafter “Civanlar”) in view of U.S. Patent Publication No. 2004/0156371 to *Kumar, et al.* (hereinafter “Kumar”) and further in view of U.S. Patent No. 6,097,772 to *Johnson, et al.* (hereinafter “Johnson”). The Applicant respectfully traverses the rejection.

Claims 5, 13 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable Civanlar, in view of Kumar and Johnson as applied to claims 1, 9 and 17 above, and further in view of U.S. Patent Publication No. 2005/0053080 to *Wybenga, et al.* (hereinafter “Wybenga”). The Applicant respectfully traverses the rejection.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a prima facie case of obviousness. MPEP § 2142, p. 2100-133 (8th ed. rev. 4, October 2005). Absent such a prima facie case, the applicant is under no obligation to produce evidence of nonobviousness. *Id.* To establish a *prima facie* case of obviousness, three basic criteria must be

met: *Id.* First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *Id.* Second, there must be a reasonable expectation of success. *Id.* Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *Id.* The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *Id.*

Independent Claim 1 recites "a switch fabric; and N Layer 2 modules coupled by said switch fabric." The claim recites that "each of said N Layer 2 modules operable to receive data packets in Layer 2 frames and forward said received data packets using Layer 2 addresses associated with said Layer 2 frames." The claim further recites "wherein a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet." The claim also recites "wherein said Layer 3 routing engine comprises a forwarding table comprising a plurality of aggregated Layer 3 addresses, wherein if the Layer 3 routing engine cannot forward the data packet, the Layer 2 engine will inspect the data packet and forward the data packet according to Layer 2 protocols."

The Office Action cites *Civanlar* (col. 3 lines 28-47) to teach "wherein a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet

through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet.” (Office Action, page 4). Further, the Office previously cited *Civanlar* (col. 3 lines 66-67 and col. 4, lines 1-7) to specifically teach routing a packet through a level 2 module, then through a layer 3 module if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet. (Advisory Action, page 2).

However, the cited portions do not teach or disclose routing a packet first through a Level 2 module and through a Layer 3 module. The cited portions are reproduced herein below:

The routing engine 107 in the intelligent router port 103 may maintain and process routing data from the routing data base 104 for use by the forwarding engine 105. Each intelligent router port 103 may be configured to independently generate its own routing tables without the need for a central routing engine and/or a master routing table. In some embodiments, information necessary for generating and/or updating routing tables may be contained in routing protocol packets received by the intelligent router port 103 from the network interface. Any known types of routing protocols packets may be received by the routing engine 107, such as those conforming to the routing Internet protocol (RIP), the open shortest path forwarding (OSPF) protocol, or the border gateway protocol 4 (BGP4). In embodiments where the routing table is independently generated, each forwarding engine 105 may be configured to forward new routing table configuration data received on one or more of the network interfaces 110 to every other intelligent router port 103 for updating each of the routing databases 104. In further embodiments, the intelligent router ports 103 may update their own routing tables according to the contents of incoming routing protocol packets. In still further embodiments, the intelligent router ports 103 may update other routers (not shown) interconnected with the router 100 using,

for example, RIP, OSPF, and/or BGP4. (*Civanlar*, col. 3, lines 28-52)

The forwarding engine 105 may process received data packets (e.g., Open System Interconnection (OSI) model Layer 3 data packets such as IP packets) and/or forward the data packets to appropriate other intelligent router ports 103 via the switching fabric 102. Specifically, the forwarding engine 105 may compare an address of a data packet with the routing table to determine the location the intelligent router port 103 to which the data packet should be forwarded. (*Civanlar*, col. 3, line 66 – col. 4, line 7) (emphasis added)

Therefore, *Civanlar* merely teaches, and is limited to teaching, that a packet is forwarded based on a location in the routing table. *Civanlar* does not teach or suggest “if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet.” Therefore, *Civanlar* cannot reasonably be interpreted as teaching “wherein a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet” as recited by independent Claim 1.

The Office Action concedes that *Civanlar* does not disclose “each of the N Layer 2 modules operable to receive data packets in Layer 2 frames and forward the received data packets using Layer 2 addresses associated with Layer 2 frames. (Office Action, page 8). The Office Action cites *Kumar* (paragraph [0042]) for its alleged disclosure of receiving and processing packets in Layer 2 frames. (Office Action, page 9). The Applicants submit that *Kumar* does not add anything that would remedy the aforementioned deficiency in *Civanlar*.

The Office Action concedes that *Civanlar* and *Kumar* do not disclose “wherein if the layer 3 routing engine cannot forward the data packet, the layer 2 engine will inspect the data packet and forward the data packet according to layer 2 protocols.” Nonetheless, the Office Action rejects independent Claim 1, contending that *Johnson* provides this necessary disclosure. (Office Action, page 10).

*Johnson* relates to a system and method for detecting speech transmissions in the presence of control signaling. (*Johnson*, Title and Abstract). The Office Action cites *Johnson* (paragraph [0094] and Figure 6) to teach “wherein if the Layer 3 routing engine cannot forward the data packet, the Layer 2 engine will inspect the data packet and forward the data packet according to Layer 2 protocols.” However, *Johnson* contains no disclosure regarding routers, Layer 2 protocols or Layer 2 or Layer 3 routing engines. Further, the Applicants are unable to ascertain to which paragraph the Office Action is citing as *Johnson* is an issued Patent and does not contain paragraph numbers. Accordingly, the Applicants submit that *Johnson* does not add anything that would remedy the aforementioned deficiency in *Civanlar* and *Kumar*.

*Civanlar* and *Kumar* and *Johnson*, taken singularly or in combination, do not teach “wherein a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet. The claim also recites “wherein said Layer 3 routing engine comprises a forwarding table comprising a plurality of

aggregated Layer 3 addresses, wherein if the Layer 3 routing engine cannot forward the data packet, the Layer 2 engine will inspect the data packet and forward the data packet according to Layer 2 protocols” as recited by independent Claim 1. Accordingly, the Applicants respectfully request that the Examiner withdraw the § 103 rejection with respect to Claim 1.

Similar to independent Claim 1, independent Claim 9 recites “a first one of said Layer 2 modules comprises a Layer 3 routing engine for forwarding a first received data packet through said switch fabric directly to a second one of said Layer 2 modules using a Layer 3 address associated with said first received data packet if said first Layer 2 module does not recognize a Layer 2 address associated with said first received data packet and wherein said Layer 3 routing engine comprises a forwarding table comprising a plurality of aggregated Layer 3 addresses,” and independent Claim 17 recites, “determining if the first Layer 2 module recognizes a Layer 2 address associated with the first received data packet; and if the first Layer 2 module does not recognize the Layer 2 address associated with the first received data packet, using a Layer 3 routing engine associated with the first Layer 2 module to forward the first received data packet through the switch fabric directly to a second one of the Layer 2 modules and wherein the Layer 3 routing engine uses a Layer 3 address associated with the first received data packet to forward the first received data packet.” Accordingly, for the reasons discussed above in connection with Claim 1, independent Claims 9 and 17 are not made obvious by the cited art. Therefore, the Applicants respectfully submit that these rejections should now be withdrawn.

Dependent Claims 3-8, which depend from independent Claim 1, dependent Claims 11-16, which depend from independent Claim 9, and dependent Claims 19-24, which depend from independent Claim 17, are also not made obvious by the cited art because they include the limitations of their respective base claims and add additional elements that further distinguish the art. Therefore, the Applicant respectfully submits that these rejections should now be withdrawn.

The Applicants disagree with the Office Action's rejections of Claims 1, 3-9, 11-17 and 19-24 based on misdescriptions and/or misapplications of *Civanlar*, *Kumar*, *Johnson* and *Wybenga* to at least some of Claims 1, 3-9, 11-17 and 19-24. However, the Applicant's arguments regarding those other shortcomings of *Civanlar*, *Kumar*, *Johnson* and *Wybenga* are moot in view of the Claim 1 arguments above. However, the Applicants reserve the right to dispute in future Office Action responses the appropriateness and the applications of *Civanlar*, *Kumar*, *Johnson* and *Wybenga* to the claims of the present application, including the right to dispute assertions made in the September 17, 2008 Office Action.

Accordingly, the Applicant respectfully requests that the Examiner withdraw the § 103 rejection with respect to these claims.

CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *jmockler@munckcarter.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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